

REMARKS

In this reissue application, claims 1-7 were unchanged and are assumed allowable. Added claims 8-11 have been amended. A new claim 12 has been added.

Applicants note the drawing objection. It is respectfully requested that the drawings from the patented file, U.S. 5,510,982, be transferred. A separate letter requesting the transfer is filed herewith.

An Information Disclosure Statement is being concurrently filed.

Applicants note the objection under 37 C.F.R. §3.73(b) regarding the establishment of ownership by the assignee. It is pointed out that the original Declaration includes an assignee's consent in accordance with 37 C.F.R. §1.172. Applicants' counsel is in the process of obtaining the required proof of ownership under 37 C.F.R. §3.73(b). The submission under 37 C.F.R. §3.73(b) will be filed shortly.

The Office Action rejected claims 8-9 as being in violation of the recapture rule. The Office Action alleges that the weight estimation means and running load estimation means were relied on by the Applicant to distinguish over the prior art in all of the original claims. This is not the case, however, as the inclusion of the weight and load estimating means in each of the

patented claims is an error which the reissue process is designed to correct.

While Applicants agree that the specification makes use of the weight and load estimation means in its most preferred embodiment, it is pointed out that the torque estimation system described at length in the specification is itself novel apart from the manner used in the preferred embodiment (see description of torque estimation system at col. 4, lines 20-40; col. 6, line 50 - col. 9, line 3). The patentability of this torque estimation feature was pointed out in the original prosecution in the Examiner's Statement of Reasons for Allowance with respect to claims 5, 14, and 21-22 which became claims 1, 5, 6 and 7, respectively, of the patent (US 5,510,982) being reissued. The Examiner stated that these claims were allowable:

...because the combination of the means/step for estimating the output torque by one of two alternative methods as respectively recited in the claims, depending on whether the ratio between the input and output speeds of the torque converter is greater than a predetermined value, with the other limitations of the respective claims is deemed to have not been taught by the cited prior art (Examiner's Amendment mailed September 5, 1995, Section 2.1 - attached as Exhibit A).

In the same Examiner's Statement, the Examiner pointed out the separate patentability of the weight estimating means (see Sections 2.2 and 2.3).

Even in the original Examiner's Office Action of May 16, 1995, it was indicated that the torque estimation claims 21-22 (now claims 6 and 7 of the '982 patent) would be allowable in view of Applicants' previous remarks (see numbered paragraph 6 in Office Action of May 16, 1995 - Exhibit B, along with page 15 of previous remarks - Exhibit C). There, Applicants' stated:

...a further refinement of the invention [is provided] in which calculation of the output torque is performed by one of two alternative methods, depending on the ratio between the input and the output speed of the torque converter. This feature is also missing from both Morita and Tanaka.

Therefore, the elimination of the unnecessary weight and running load estimation means from pending claims 8-11 does not violate the recapture rule in view of the patentability of the torque estimation system. The "recapture rule" is designed to not allow an applicant to reclaim subject matter deliberately cancelled in an application to obtain a patent. *In re Clement*, 131 F.3d 1464, 45 USPQ 2nd 1161 (Fed. Cir. 1997). Here, the torque estimation feature was considered the germane aspect with respect to at least some of the previous prior art rejections. Applicants therefore now present additional claims 8-12 directed toward the torque estimation system and method. The inclusion of the weight and load estimation means within these claims is not necessary to their patentability as pointed out above. Hence, Applicants submit claims 8-9 are not in violation of the recapture rule.

The Office Action rejected claims 8-11 under 35 U.S.C. §112, first paragraph, as containing subject matter not described in the specification so as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. Applicants respectfully traverse this rejection in view of the amendments made with respect to claims 8-11 and the following remarks.

Claims 8-11 have been amended to recite a "torque estimation system for estimating an input torque to be used in controlling an automatic transmission". This torque estimation system is described at great length by the inventors with respect to Figures 1 and 10-14. As described at col. 6, lines 50 et seq., the torque estimating system estimates the torque in accordance with two different methods, one based on the torque converter characteristic and another based on the engine torque characteristic. The use of two torque estimating units has the advantage that the precise output torque can be estimated when the slip of the torque converter is great using the torque converter characteristic, whereas when the slip of the torque is small, the output torque can be calculated based on the engine torque characteristic to account for accessory torques (col. 6, line 58 - col. 7, line 12). This novel manner of estimating the torque can then be used in accordance with the preferred embodiment described in the '982 patent to obtain the estimated

running load based on the estimated vehicle weight (col. 6, lines 46-49) .

As amended, independent claim 8 and dependent claims 9-11 describe a torque estimation system. Such a system is described in the specification in a manner which reasonably conveys to the skilled artisan that the inventors had possession of this invention.

Regarding the Office Action's objection to the claims for failing to recite essential subject matter to the invention, Applicants note that, as now claimed as a torque estimation system, all essential features are present.

The Office Action further rejected claims 8-11 under 35 U.S.C. §112, second paragraph. Accordingly, Applicants have amended the claims to obviate this rejection. Attached as Exhibit D hereto is a marked-up copy of claims 8-11 as amended. In this regard, Applicants have adopted the Examiner's suggestions with respect to referencing the "estimated" input torque. Other minor corrections were also made to provide proper antecedent basis.

Finally, Applicants have added an additional torque estimation method claim 12. For the reasons set forth above, this claim is submitted to be patentable as well.


For the foregoing reasons, Applicants submit claims 1-12 are now in condition for allowance. An early notice to that effect is solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #381TO/41092RE).

Respectfully submitted,

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